UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,035	12/03/2003	Rashid A. Attar	020524	9426

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EXAMINER
FIGUEROA, MARISOL

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/728,035	ATTAR ET AL.
	Examiner	Art Unit	
	Marisol Figueroa	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 April 2006*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 April 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

1.   The Art Unit location of your application in the USPTO has changed. To aid in correlating

any papers for this application, all further correspondence regarding this application should be

directed to Art Unit 2617.

Response to Amendment

2.   This Action is in response to Applicant's amendment filed on 4/10/2006. Applicant

amended claims 1, 6, 11, 19, 21, 22, 29, 32, 34, 37, and 39. Accordingly, claims 1-39 are currently

pending in the present application.

Response to Arguments

3.   Applicant's arguments with respect to claims 1, 21, and 39 have been considered but are

moot in view of the new ground(s) of rejection.

4.   The indicated allowability of claims 6, 11, 19, 20, 23, 29, 32, 34, 37, and 38 is withdrawn in

view of the newly discovered reference(s). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section
> 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the
> subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary
> skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

6.   **Claims 1, 2, 3, 10, 14, 17, 21, 22, 33, and 39** are rejected under 35 U.S.C. 103(a) as being

unpatentable over GANDHI et al. (US 6,944,449 B1) in view of PADOVANI et al. (US 6,442,398

B1).

Regarding claim 1, Gandhi discloses an apparatus for communications, comprising:

means for communicating, from a base station, with a plurality of communication devices,

the communications placing a load on the base station (Figure 1 shows a base station 10 that

communicates with a subscriber station 24 though its receiver, although only one subscriber station

is shown it is known that a base station can communicate with a plurality of subscriber stations and

each place a load in the system);

means for monitoring a plurality of parameters each relating to the load on the base station

(col.2, lines 26-32; the base station includes a pair of measurers for measuring, i.e. monitoring,

system performance indicators); and

means for detecting an overload as a result of one of the parameters crossing a threshold

(col.2, lines 54 – col.3, lines 1-5; col.4, lines 47 – col.5, lines 1-10; col.9, lines 30-33; the base station

establishes a blocking threshold upon the measured second performance indicator that represent an

overload control threshold for preventing overloading of the wireless communication systems with

active subscribers stations, therefore if the first performance indicator exceeds the blocking

threshold the wireless communication system rejects new calls because the system is overloaded).

Gandhi fail to disclose wherein the first performance indicator (i.e., one of the parameters)

crosses the threshold for an entire period of time for detecting overload. However, this feature is

well known in the art and Padovani is evidence of the fact. Padovani teaches a method and

apparatus for determining loading (i.e., parameter) in a communication system and comparing the

loading with a overload threshold, and when the system loading has exceeded an overload threshold for more than a predetermined time all new call originations are denied (abstract; col.17, lines 1-10).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to detect overload when a parameter crosses a threshold for an entire period of time, as suggested by Padovani, because this assures that the system is in fact overloaded to avoid premature actions for relieving the overload condition when the system is not really overloaded.

Regarding claim 2, the combination of Gandhi and Padovani disclose the apparatus of claim 1, Gandhi discloses wherein one of the parameters comprises receiver stability at the base station, and the overload is detected as a result of a receiver stability estimate exceeding the threshold (col.2, line 54 – col.3, lines 1-5; col.4, lines 58-62; col.3, lines 23-29, 36-42; col.4, lines 4-7; the base station measures a first performance indicator, i.e. parameter, which is the interference rise over the background noise that is a measure of signal quality or reliability over a defined coverage area for the reverse link and is compared with a blocking threshold that represents a control overload benchmark, therefore if the interference rise over the background noise exceeds the blocking threshold the system will be overloaded).

Gandhi fail to disclose wherein the first performance indicator (i.e., one of the parameters) crosses the threshold for a period of time for detecting overload. However, this feature is well known in the art and Padovani is evidence of the fact. Padovani teaches a method and apparatus for determining loading (i.e., parameter) in a communication system and comparing the loading with a overload threshold, and when the system loading has exceeded an overload threshold for more than a predetermined time all new call originations are denied (abstract; col.17, lines 1-10).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to detect overload when a parameter crosses a threshold for a period of time, as

suggested by Padovani, because this assures that the system is in fact overloaded to avoid premature actions for relieving the overload condition when the system is not really overloaded.

Regarding claim 3, the combination of Gandhi and Padovani disclose the apparatus of claim 2, Gandhi discloses wherein the receiver stability estimate comprises a rise-over-thermal (col.3, lines 57-60).

Regarding claim 10, the combination of Gandhi and Padovani disclose the apparatus of claim 1, Gandhi fail to disclose wherein one of the parameters comprises a number of the communication devices in communication with the base station.

However, Padovani teaches that a simple means for determining reverse link loading is to simply count the number of active users in the base station (col.4, lines 32-34). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention for one of the monitored parameters to be a number of the communication devices in communication with the base station as suggested by Padovani, because it is a simple means for determining reverse link loading.

Regarding claim 14, the combination of Gandhi and Padovani disclose the apparatus of claim 1, Gandhi discloses wherein one of the parameters comprises receiver stability at the base station (col.2, line 54 – col.3, lines 1-5; col.4, lines 58-62; col.3, lines 23-29, 36-42; col.4, lines 4-7; the base station measures a first performance indicator, i.e. parameter, which is the interference rise over the background noise that is a measure of signal quality or reliability over a defined coverage area for the reverse link and is compared with a blocking threshold that represents a control overload benchmark, therefore if the interference rise over the background noise exceeds the blocking threshold the system will be overloaded).

Regarding claim 17, the combination of Gandhi and Padovani disclose the apparatus of claim 1, Gandhi discloses further comprising: means for implementing a control mechanism to reduce the overload ((col.2, lines 54 – col.3, lines 1-5; col.4, lines 47 – col.5, lines 1-10; col.9, lines 30-33; the base station establishes a blocking threshold upon the measured second performance indicator that represent an overload control threshold for preventing overloading the wireless communication systems with active subscribers stations, therefore if the first performance indicator exceeds the blocking threshold the wireless communication system rejects new calls to prevent coverage and/or performance degradation due to overload conditions).

Regarding claim 21, Gandhi discloses a base station configured to support communications with a plurality of communication devices, the communications placing a load on the base station, the base station comprising:

a processor configured to monitor a plurality of parameters each relating to the load on the base station (col.2, lines 26-32; the base station includes a pair of measurers for measuring, i.e. monitoring, system performance indicators), and to detect an overload as a result of one of the parameters crossing a threshold (col.2, lines 54 – col.3, lines 1-5; col.4, lines 47 – col.5, lines 1-10; col.9, lines 30-33; the base station establishes a blocking threshold upon the measured second performance indicator that represent an overload control threshold for preventing overloading of the wireless communication systems with active subscribers stations, therefore if the first performance indicator exceeds the blocking threshold the wireless communication system rejects new calls because the system is overloaded).

Gandhi fail to disclose wherein the first performance indicator (i.e., one of the parameters) crosses the threshold for an entire period of time for detecting overload. However, this feature is well known in the art and Padovani is evidence of the fact. Padovani teaches a method and

apparatus for determining loading (i.e., parameter) in a communication system and comparing the loading with a overload threshold, and when the system loading has exceeded an overload threshold for more than a predetermined time all new call originations are denied (abstract; col.17, lines 1-10).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to detect overload when a parameter crosses a threshold for an entire period of time, as suggested by Padovani, because this assures that the system is in fact overloaded to avoid premature actions for relieving the overload condition when the system is not really overloaded.

Regarding claim 22, the combination of Gandhi and Padovani disclose the base station of claim 21, Gandhi discloses further comprising a receiver (Figure 1; Receiver 14), and wherein one of the parameters is a function of receiver stability, the processor being further configured to detect the overload as a result of a receiver stability estimate exceeding the threshold (col.2, line 54 – col.3, lines 1-5; col.4, lines 58-62; col.3, lines 23-29, 36-42; col.4, lines 4-7; the base station measures a first performance indicator, i.e. parameter, which is the interference rise over the background noise that is a measure of signal quality or reliability over a defined coverage area for the reverse link and is compared with a blocking threshold that represents a control overload benchmark, therefore if the interference rise over the background noise exceeds the blocking threshold the system will be overloaded).

Gandhi fail to disclose wherein the first performance indicator (i.e., one of the parameters) crosses the threshold for a period of time for detecting overload. However, this feature is well known in the art and Padovani is evidence of the fact. Padovani teaches a method and apparatus for determining loading (i.e., parameter) in a communication system and comparing the loading with a overload threshold, and when the system loading has exceeded an overload threshold for more than a predetermined time all new call originations are denied (abstract; col.17, lines 1-10).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to detect overload when a parameter crosses a threshold for a period of time, as suggested by Padovani, because this assures that the system is in fact overloaded to avoid premature actions for relieving the overload condition when the system is not really overloaded.

Regarding claim 33, the combination of Gandhi and Padovani disclose the base station of claim 21, Gandhi discloses further comprising a receiver and transmitter, and wherein the processor is further configured to support communications with the communication devices, and wherein one of the parameters is a function of receiver stability (col.2, line 54 – col.3, lines 1-5; col.4, lines 58-62; col.3, lines 23-29, 36-42; col.4, lines 4-7; the base station measures a first performance indicator, i.e. parameter, which is the interference rise over the background noise that is a measure of signal quality or reliability over a defined coverage area for the reverse link and is compared with a blocking threshold that represents a control overload benchmark, therefore if the interference rise over the background noise exceeds the blocking threshold the system will be overloaded).

Regarding claim 39, Gandhi disclose a method for communications, comprising: communicating, from a base station, with a plurality of communication devices, the communications placing a load on the base station; monitoring a plurality of parameters each relating to the load on the base station (col.2, lines 26-32; the base station includes a pair of measurers for measuring, i.e. monitoring, system performance indicators); and detecting an overload as a result of one of the parameters crossing a threshold (col.2, lines 54 – col.3, lines 1-5; col.4, lines 47 – col.5, lines 1-10; col.9, lines 30-33; the base station establishes a blocking threshold upon the measured second performance indicator that represent an overload control threshold for preventing overloading of the wireless communication systems with active subscribers stations, therefore if the first

performance indicator exceeds the blocking threshold the wireless communication system rejects new calls because the system is overloaded).

Gandhi fail to disclose wherein the first performance indicator (i.e., one of the parameters) crosses the threshold for an entire period of time for detecting overload. However, this feature is well known in the art and Padovani is evidence of the fact. Padovani teaches a method and apparatus for determining loading (i.e., parameter) in a communication system and comparing the loading with a overload threshold, and when the system loading has exceeded an overload threshold for more than a predetermined time all new call originations are denied (abstract; col.17, lines 1-10).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to detect overload when a parameter crosses a threshold for an entire period of time, as suggested by Padovani, because this assures that the system is in fact overloaded to avoid premature actions for relieving the overload condition when the system is not really overloaded.

7.   **Claims 4, 5, 24, and 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over GANDHI et al. in view of PADOVANI et al., and further in view of LEE et al. (US 2003/0125068 A1).

Regarding claim 4, the combination of Gandhi and Padovani disclose the apparatus of claim 3, however fail disclose further comprising means for generating power control commands for each of the communication devices, and adjusting the threshold as a function of the power control commands. Lee discloses for performing power control in a mobile communication system, wherein the base station generates power control commands based on a power control threshold value for a first terminal and adjusted according to a communication environment (p.0012-0020; p.0029-0037). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to provide means for generating power control commands for each of the communication

devices and adjust a threshold as a function of the power control command as suggested by Lee, in

order   to   reduce   signal   interference   in   the   system.

Regarding claim 5, the combination of Gandhi, Padovani, and Lee disclose the apparatus

of claim 4, Lee further discloses comprising means for monitoring the communications from each

of the communication devices to detect errors, and wherein the adjustment of the threshold is

further a function of the detected errors (p.0038-0039). Therefore, it would have been obvious to

one having ordinary skill in the art at the time of the invention to monitor the communication from

the communication devices to detect errors and adjust the threshold as a function of the detected

errors as suggested by Lee, in order to decrease for example the frame errors of voice data.

Regarding claim 24, the combination of Gandhi and Padovani disclose the base station of

claim 22, but fails to disclose wherein the processor is further configured to generate power control

commands for each of the communication devices, and adjust the threshold as a function of the

power control commands. Lee discloses for performing power control in a mobile communication

system, wherein the base station generates power control commands based on a power control

threshold value for a first terminal and adjusted according to a communication environment

(p.0012-0020; p.0029-0037). Therefore, it would have been obvious to one having ordinary skill in

the art at the time of the invention for the processor to be configured to generate power control

commands and adjust a threshold as a function of the power control command as suggested by Lee,

in order to reduce signal interference in the system.

Regarding claim 25, the combination of Gandhi, Padovani, and Lee disclose the base

station of claim 24, Lee further discloses wherein the processor is further configured to monitor

communications from the communication devices to detect errors, and wherein the adjustment of

the threshold by the processor is further a function of the detected errors (p.0038-0039). Therefore,

it would have been obvious to one having ordinary skill in the art at the time of the invention to monitor the communication from the communication devices to detect errors and adjust the threshold as a function of the detected errors as suggested by Lee, in order to decrease for example the frame errors of voice data.

8.   **Claims 7-9, and 26-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over GANDHI et al. in view of PADOVANI et al., and further in view of LAAKSO (US 2003/0003921 A1).

Regarding claim 7, the combination of Gandhi and Padovani disclose the apparatus of claim 1, but fail to disclose wherein one of the parameters comprises transmission power requirements for a base station transmitter, the transmission power requirements being derived from feedback from the communication devices.

However, Laakso teaches a method for traffic load control in a telecommunication network comprising the steps of setting a first reference load value for the load of a respective cell (abstract, lines 1-11); the method measures the parameter PrxTotal which is the total received power in the uplink measured on cell basis (Page 3, Table), and establishes an overload condition if the PrxTotal exceeds the overload threshold PrxThreshold (p.0071; p.0074). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention that one of monitored parameters comprises transmission power requirements for a base station transmitter as suggested by Laakso, because is a parameter well known to be used to estimate and control the state of congestion of a communication system due to wireless communication devices.

Regarding claim 8, the combination of Gandhi, Padovani, and Laakso disclose the apparatus of claim 7, Laakso further disclose wherein the transmission power requirements comprise transmission power requirements for a plurality of reverse power control (RPC) channels, each of

the RPC channels being assigned to one of the communication devices (Page 3, Table; the method measures the PrxTotal which is the total received power in the uplink, i.e. reverse channels). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention that the transmission power requirements comprises transmission power requirements for a plurality of reverse power control channels as suggested by Laakso, because it is well known that communication systems establishes reception power requirements to ensure the stability of the network.

Regarding claim 9, the combination of Gandhi, Padovani, and Laakso disclose the apparatus of claim 7, Laakso further disclose wherein the overload is detected as a result of the transmission power requirements exceeding a maximum transmission power capability of the base station transmitter (p.0123, lines 1-9). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to detect an overload condition as a result of the transmission power requirements exceeding a maximum transmission power capability as suggested by Laakso, because the transmission power is too much and the system can become unstable.

Regarding claim 26, the combination of Gandhi and Padovani disclose the base station of claim 21, Gandhi discloses further comprising a transmitter (Figure 1; Transmitter 12), however Gandhi fail to disclose wherein one of the parameters is a function of the transmission power requirements for the transmitter, the processor being further configured to derive transmission power requirements from feedback from the communication devices.

Laakso teaches a method for traffic load control in a telecommunication network comprising the steps of setting a first reference load value for the load of a respective cell (abstract, lines 1-11); the method measures the parameter PrxTotal which is the total received power in the uplink measured on cell basis (Page 3, Table), and establishes an overload condition if the PrxTotal exceeds

the overload threshold PrxThreshold (p.0071; p.0074). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention that one of monitored parameters comprises transmission power requirements for a base station transmitter as suggested by Laakso, because is a parameter well known to be used to estimate and control the state of congestion of a communication system due to wireless communication devices.

Regarding claim 27, the combination of Gandhi, Padovani, and Laakso disclose the base station of claim 26, Laakso further disclose wherein the transmission power requirements comprise transmission power requirements for a plurality of reverse power control (RPC) channels, each of the RPC channels being assigned to one of the communication devices (Page 3, Table; the method measures the PrxTotal which is the total received power in the uplink, i.e. reverse channels). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention that the transmission power requirements comprises transmission power requirements for a plurality of reverse power control channels as suggested by Laakso, because it is well known that communication systems establishes reception power requirements to ensure the stability of the network.

Regarding claim 28, the combination of Gandhi, Padovani, and Laakso disclose the base station of claim 26, Laakso further disclose wherein the overload is detected as a result of the transmission power requirements exceeding a maximum transmission power capability of the base station transmitter (p.0123, lines 1-9). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to detect an overload condition as a result of the transmission power requirements exceeding a maximum transmission power capability as suggested by Laakso, because the transmission power is too much and the system can become unstable.

9.   **Claims 12 and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over GANDHI et al. in view of PADOVANI et al., and further in view of VOLFTSUN et al. (US 6,707,792 B1).

Regarding claim 12, the combination of Gandhi and Padovani disclose the apparatus of claim 1, however fails to disclose to further comprise means for detecting a second degree of overload as a result of said one of the parameters crossing a second threshold.

Volftsun teaches a method and apparatus for reducing overload conditions of a node of a communication system, it establishes pairs of overload thresholds values and each overload threshold correspond to the current saturation level (abstract). The pair of thresholds corresponds to an upper and a lower overload level values and correspond to saturation conditions in the node (col.2, line 34 – col. 3, lines 1-7). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to detect a second degree of overload level as a result of one of the parameters crossing a second threshold as suggested by Volftsun, because a second threshold may correspond to an upper overload threshold value that indicates a saturation condition in the base station which is an indication of overload that is higher than the overload resulting from crossing a lower overload threshold value.

Regarding claim 30, the combination of Gandhi and Padovani disclose the base station of claim 21, however fails to disclose wherein the processor is further configured to detect a second degree overload as a result of the one of the parameters crossing a second threshold.

Volftsun teaches a method and apparatus for reducing overload conditions of a node of a communication system, it establishes pairs of overload thresholds values and each overload threshold correspond to the current saturation level (abstract). The pair of thresholds corresponds to an upper and a lower overload level values and correspond to saturation conditions in the node (col.2, line 34 – col. 3, lines 1-7). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to detect a second degree of overload level as a result of one of the parameters crossing a second threshold as suggested by Volftsun, because a second threshold

may correspond to an upper overload threshold value that indicates a saturation condition in the

base station which is an indication of overload that is higher than the overload resulting from

crossing a lower overload threshold value.

10.   **Claims 13 and 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over GANDHI

et al. in view of PADOVANI et al., and further in view of DJURIC (US 6,785,546 B1).

Regarding claim 13, the combination of Gandhi and Padovani disclose the apparatus of claim 1, however fails to disclose wherein one of the parameters comprises loading on processing resources used for communication with the communication devices.

Djuric teaches a method and apparatus that monitors the traffic (i.e. load) in an application processor used of a wireless communication network in order to maintain call processing related traffic below a predefined threshold to avoid overload (abstract; col.1, line 50-col.2, lines 1-9).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention for one of the parameters to comprise loading on processing resources used for communication as suggested by Djuric, in order to maintain the traffic below a predefined threshold and improve the overall performance of the base station processor.

Regarding claim 31, the combination of Gandhi and Padovani disclose the base station of claim 21, Gandhi discloses wherein the processor is further configured to support communications with the communication devices, however fails to disclose wherein one of the parameters comprises loading on processing resources used for communication with the communication devices.

Djuric teaches a method and apparatus that monitors the traffic (i.e. load) in an application processor used of a wireless communication network in order to maintain call processing related traffic below a predefined threshold to avoid overload (abstract; col.1, line 50-col.2, lines 1-9).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention for one of the parameters to comprise loading on processing resources used for communication as suggested by Djuric, in order to maintain the traffic below a predefined threshold and improve the overall performance of the base station processor.

11.   **Claims 15 and 35** are rejected under 35 U.S.C. 103(a) as being unpatentable over GANDHI et al. in views of PADOVANI et al., LAAKSO, and DJURIC.

Regarding claim 15, the combination of Gandhi and Padovani disclose the apparatus of claim 1, Gandhi discloses wherein one of the parameters comprises receiver stability at the base station (col.2, line 54 – col.3, lines 1-5; col.4, lines 58-62; col.3, lines 23-29, 36-42; col.4, lines 4-7; the base station measures a first performance indicator, i.e. parameter, which is the interference rise over the background noise that is a measure of signal quality or reliability over a defined coverage area for the reverse link and is compared with a blocking threshold that represents a control overload benchmark, therefore if the interference rise over the background noise exceeds the blocking threshold the system will be overloaded).

However, the combination of Gandhi and Padovani fail to disclose wherein a second one of the parameters comprises base station transmission power requirements derived from feedback from the communication devices. Laakso teaches a method for traffic load control in a telecommunication network comprising the steps of setting a first reference load value for the load of a respective cell (abstract, lines 1-11); the method measures the parameter PrxTotal which is the total received power in the uplink measured on cell basis (Page 3, Table), and establishes an overload condition if the PrxTotal exceeds the overload threshold PrxThreshold (p.0071; p.0074). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention that a second monitored parameter comprises transmission power requirements for a base station transmitter as suggested by Laakso, because is a parameter well known to be used to estimate and control the state of congestion of a communication system due to wireless communication devices.

Nevertheless, the combination of Gandhi, Padovani, and Laakso fail to disclose monitoring a third parameter that comprises loading on processing resources used for communication with the communication devices.

Djuric teaches a method and apparatus that monitors the traffic (i.e. load) in an application

processor used of a wireless communication network in order to maintain call processing related

traffic below a predefined threshold to avoid overload (abstract; col.1, line 50-col.2, lines 1-9).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the

invention for the third of the monitored parameters to comprise loading on processing resources

used for communication as suggested by Djuric, in order to maintain the traffic below a predefined

threshold and improve the overall performance of the base station processor.

Regarding claim 35, the combination of Gandhi and Padovani disclose the base station of

claim 21, Gandhi discloses further comprising a receiver and transmitter (Figure 1), and wherein the

processor is further configured to support communications with the communication devices, and

wherein one of the parameters is a function of receiver stability (col.2, line 54 – col.3, lines 1-5; col.4,

lines 58-62; col.3, lines 23-29, 36-42; col.4, lines 4-7; the base station measures a first performance

indicator, i.e. parameter, which is the interference rise over the background noise that is a measure

of signal quality or reliability over a defined coverage area for the reverse link and is compared with a

blocking threshold that represents a control overload benchmark, therefore if the interference rise

over the background noise exceeds the blocking threshold the system will be overloaded).

However, Gandhi and Padovani fail to disclose wherein the second one of the parameters is

a function of transmission power requirements for the transmitter. Laakso teaches a method for

traffic load control in a telecommunication network comprising the steps of setting a first reference

load value for the load of a respective cell (abstract, lines 1-11); the method measures the parameter

PrxTotal which is the total received power in the uplink measured on cell basis (Page 3, Table), and

establishes an overload condition if the PrxTotal exceeds the overload threshold PrxThreshold

(p.0071; p.0074). Therefore, it would have been obvious to one having ordinary skill in the art at the

time of the invention that a second monitored parameter comprises transmission power requirements for a base station transmitter as suggested by Laakso, because is a parameter well known to be used to estimate and control the state of congestion of a communication system due to wireless communication devices.

Nevertheless, the combination of Gandhi, Padovani, and Laakso fail to disclose monitoring a third parameter that is a function of loading on the processor.

Djuric teaches a method and apparatus that monitors the traffic (i.e. load) in an application processor used of a wireless communication network in order to maintain call processing related traffic below a predefined threshold to avoid overload (abstract; col.1, line 50-col.2, lines 1-9). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention for the third of the monitored parameters to comprise loading on processing resources used for communication as suggested by Djuric, in order to maintain the traffic below a predefined threshold and improve the overall performance of the base station processor.

12.   **Claims 16 and 36** are rejected under 35 U.S.C. 103(a) as being unpatentable over GANDHI et al. in views of PADOVANI et al., LAAKSO, and DJURIC.

Regarding claim 16, the combination of Gandhi, Padovani, Laakso, and Djuric disclose apparatus of claim 15, Gandhi, Laakso, and Djuric fail to disclose wherein a fourth one of the parameters comprises a number of the communication devices in communication with the base station. Padovani teaches that a simple means for determining reverse link loading is to simply count the number of active users in the base station (col.4, lines 32-34). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention for one of the monitored parameters to be a number of the communication devices in communication with the base station as suggested by Padovani, because it is a simple means for determining reverse link loading.

Regarding claim 36, the combination of Gandhi, Padovani, Laakso, and Djuric disclose the base station of claim 35, Gandhi, Laakso, and Djuric fail to disclose wherein a fourth one of the parameters is a function of the number of communication devices in communication with the base station. Padovani teaches that a simple means for determining reverse link loading is to simply count the number of active users in the base station (col.4, lines 32-34). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention for one of the monitored parameters to be a number of the communication devices in communication with the base station as suggested by Padovani, because it is a simple means for determining reverse link loading.

13.   **Claim 18** is rejected under 35 U.S.C. 103(a) as being unpatentable over GANDHI et al. in view of PADOVANI et al., and further in view of BENDER et al. (US 2002/0155852 A1).

Regarding claim 18, the combination of Gandhi and Padovani disclose the apparatus as in claim 17, however fail to disclose wherein the means for implementing a control mechanism comprises: means for determining idle users; and means for bumping service to idle users.

Bender teaches a method for supervising connections with wireless access terminals and releasing the access terminals when they become idle for a predetermined period of time (p.0036, lines 1-11). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention for the control mechanism to include means for determining idle users and means for bumping service to idle users as suggested by Bender, in order to free and maximize the RF resources for use by other access terminals.

14.   **Claims 6 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over GANDHI et al. in view of PADOVANI et al., and further in view of GEHI et al. (US 6,134,216).

Regarding claim 6, Gandhi discloses an apparatus for communications, comprising:

means for communicating, from a base station, with a plurality of communication devices, the communications placing a load on the base station (Figure 1 shows a base station 10 that communicates with a subscriber station 24 though its receiver, although only one subscriber station is shown it is known that a base station can communicate with a plurality of subscriber stations and each place a load in the system);

means for monitoring a plurality of parameters each relating to the load on the base station (col.2, lines 26-32; the base station includes a pair of measurers for measuring, i.e. monitoring, system performance indicators); wherein one of the parameters comprises receiver stability at the base station, and the overload is detected as a result of a receiver stability estimate exceeding the threshold (col.2, line 54 – col.3, lines 1-5; col.4, lines 58-62; col.3, lines 23-29, 36-42; col.4, lines 4-7; the base station measures a first performance indicator, i.e. parameter, which is the interference rise over the background noise that is a measure of signal quality or reliability over a defined coverage area for the reverse link and is compared with a blocking threshold that represents a control overload benchmark, therefore if the interference rise over the background noise exceeds the blocking threshold the system will be overloaded).

Gandhi fail to disclose wherein the first performance indicator (i.e., one of the parameters) crosses the threshold for a period of time for detecting overload. However, this feature is well known in the art and Padovani is evidence of the fact. Padovani teaches a method and apparatus for determining loading (i.e., parameter) in a communication system and comparing the loading with a overload threshold, and when the system loading has exceeded an overload threshold for more than a predetermined time all new call originations are denied (abstract; col.17, lines 1-10).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to detect overload when a parameter crosses a threshold for a period of time, as

suggested by Padovani, because this assures that the system is in fact overloaded to avoid premature actions for relieving the overload condition when the system is not really overloaded.

The combination of Gandhi and Padovani fail to disclose means for detecting a second degree overload as a result of the receiver stability estimate exceeding the threshold for a second period of time longer than the first period of time.

However, this feature is well known in the art and Gehi is evidence of the fact. Gehi teaches a method of responding to overload in a real time system such as a telecommunication system, in where overload is measured through the use of a control parameter and the overload indication is reduced to one of a plurality of levels (i.e., degrees), the level corresponding to a longer term (i.e., second degree) more serious overload are based on control measurements over a longer period of time than the less serious short term (i.e., first degree) overload, and therefore the actions taken for relieving overloading are distinguished by the level of overload (abstract; col.2, lines 5-36).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to detect a second degree overload as a result of a parameter (i.e., receiver stability) exceeding a threshold for a period of time longer than the first period, as suggested by Gehi, because this distinguishes the severity of the overload condition and the control actions to be performed according to the level of overload in the system.

Regarding claim 23, Gandhi discloses a base station configured to support communications with a plurality of communication devices, the communications placing a load on the base station, the base station comprising:

a receiver (Figure 1; Receiver 14);

a processor configured to monitor a plurality of parameters each relating to the load on the base station (col.2, lines 26-32; the base station includes a pair of measurers for measuring, i.e.

monitoring, system performance indicators), wherein one of the parameters is a function of receiver

stability, the processor being further configured to detect the overload as a result of a receiver

stability estimate exceeding the threshold (col.2, line 54 – col.3, lines 1-5; col.4, lines 58-62; col.3,

lines 23-29, 36-42; col.4, lines 4-7; the base station measures a first performance indicator, i.e.

parameter, which is the interference rise over the background noise that is a measure of signal

quality or reliability over a defined coverage area for the reverse link and is compared with a

blocking threshold that represents a control overload benchmark, therefore if the interference rise

over the background noise exceeds the blocking threshold the system will be overloaded).

Gandhi fail to disclose wherein the first performance indicator (i.e., one of the parameters)

crosses the threshold for a period of time for detecting overload. However, this feature is well

known in the art and Padovani is evidence of the fact. Padovani teaches a method and apparatus for

determining loading (i.e., parameter) in a communication system and comparing the loading with a

overload threshold, and when the system loading has exceeded an overload threshold for more than

a predetermined time all new call originations are denied (abstract; col.17, lines 1-10).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time

of the invention, to detect overload when a parameter crosses a threshold for a period of time, as

suggested by Padovani, because this assures that the system is in fact overloaded to avoid premature

actions for relieving the overload condition when the system is not really overloaded.

The combination of Gandhi and Padovani fail to disclose wherein the processor is further

configured to detect a second degree overload as a result of the receiver capacity exceeding the

threshold for a second period of time longer then the first period of time.

However, this feature is well known in the art and Gehi is evidence of the fact. Gehi teaches

a method of responding to overload in a real time system such as a telecommunication system, in

where overload is measured through the use of a control parameter and the overload indication is reduced to one of a plurality of levels (i.e., degrees), the level corresponding to a longer term (i.e., second degree) more serious overload are based on control measurements over a longer period of time than the less serious short term (i.e., first degree) overload, and therefore the actions taken for relieving overloading are distinguished by the level of overload (abstract; col.2, lines 5-36).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to detect a second degree overload as a result of a parameter (i.e., receiver stability) exceeding a threshold for a period of time longer than the first period, as suggested by Gehi, because this distinguishes the severity of the overload condition and the control actions to be performed according to the level of overload in the system.

15.   **Claim 19** is rejected under 35 U.S.C. 103(a) as being unpatentable over GANDHI et al. in views of BENDER (US 2002/0155852 A1) and KIM et al. (US 6,456,850 B1).

Regarding claim 19, Gandhi discloses an apparatus for communications, comprising:

means for communicating, from a base station, with a plurality of communication devices, the communications placing a load on the base station (Figure 1 shows a base station 10 that communicates with a subscriber station 24 though its receiver, although only one subscriber station is shown it is known that a base station can communicate with a plurality of subscriber stations and each place a load in the system);

means for monitoring a plurality of parameters each relating to the load on the base station (col.2, lines 26-32; the base station includes a pair of measurers for measuring, i.e. monitoring, system performance indicators); and

means for detecting an overload as a result of one of the parameters crossing a threshold (col.2, lines 54 – col.3, lines 1-5; col.4, lines 47 – col.5, lines 1-10; col.9, lines 30-33; the base station

establishes a blocking threshold upon the measured second performance indicator that represent an overload control threshold for preventing overloading of the wireless communication systems with active subscribers stations, therefore if the first performance indicator exceeds the blocking threshold the wireless communication system rejects new calls because the system is overloaded);

and means for implementing a control mechanism to reduce the overload (col.2, lines 54 – col.3, lines 1-5; col.4, lines 47 – col.5, lines 1-10; col.9, lines 30-33; when the first performance indicator exceeds the blocking threshold the wireless communication system rejects new calls to prevent coverage and/or performance degradation due to overload conditions).

Gandhi fail to disclose that the control mechanism to reduce overload comprises means for determining idle users; means for bumping service to idle users; means for determining high data users; and means for bumping service to high data users.

However, Bender teaches a method for supervising connections with wireless access terminals and releasing the access terminals when they become idle for a predetermined period of time (p.0036, lines 1-11); and

Kim teaches a method for preventing overload conditions in a communication system that performs a call load analysis to each of the individual subscribers, and the individuals subscribers whose contributions to the average call load are deemed significant (i.e., high data) are identified and removed from the system (abstract; col.8, lines 13-34).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, wherein the control mechanism comprises means for determining idle and high data users and means for bumping service to idle and high data user, as suggested by Bender and Kim, because bumping idle users free and maximize the RF resources for use by other access

terminals, and bumping high data users causes a communication system to no longer be in an overload condition.

16.   **Claim 20** is rejected under 35 U.S.C. 103(a) as being unpatentable over GANDHI et al. in views of BENDER and KIM et al., and further in view of KATOH et al. (US 5,949,757).

        Regarding claim 20, the combination of Gandhi, Bender, and Kim disclose the apparatus as in claim 19, but fail to disclose means for determining a first group of users having transferred a first amount of data; and means for bumping service to the first group of users.

        However, Katoh teaches a method for monitoring packet flow in a communication system, the system includes a connection group monitor means that monitors the flows of packets transferred over the connection group and checks whether the flow of packets (i.e., amount of data) exceeds a threshold and if the flow exceeds the threshold the monitor means discard the packets (i.e., bump service to the group) so congestion does not occur (col.2, lines 24-58).

        Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to determine a first group having transferred a first amount of data and bumping service to the first group, as suggested by Katoh, in order to regulate the amount of data transmitted by a group of users so congestion does not occur.

17.   **Claims 11 and 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over GANDHI et al. in view of VOLFTSUN et al.

        Regarding claim 11, Gandhi discloses an apparatus for communications, comprising:

        means for communicating, from a base station, with a plurality of communication devices, the communications placing a load on the base station (Figure 1 shows a base station 10 that communicates with a subscriber station 24 though its receiver, although only one subscriber station

is shown it is known that a base station can communicate with a plurality of subscriber stations and each place a load in the system);

means for monitoring a plurality of parameters each relating to the load on the base station (col.2, lines 26-32; the base station includes a pair of measurers for measuring, i.e. monitoring, system performance indicators); and

means for detecting an overload as a result of one of the parameters crossing a threshold (col.2, lines 54 – col.3, lines 1-5; col.4, lines 47 – col.5, lines 1-10; col.9, lines 30-33; the base station establishes a blocking threshold upon the measured second performance indicator that represent an overload control threshold for preventing overloading of the wireless communication systems with active subscribers stations, therefore if the first performance indicator exceeds the blocking threshold the wireless communication system rejects new calls because the system is overloaded).

Gandhi fail to disclose means for detecting a second type of overload as a result of one of the parameters crossing a second threshold.

However, Volftsun teaches a method and apparatus for reducing overload conditions of a node of a communication system, it establishes pairs of overload thresholds values and each overload threshold correspond to the current saturation level (abstract). The pair of thresholds corresponds to an upper and a lower overload level values and correspond to saturation conditions in the node (col.2, line 34 – col. 3, lines 1-7).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention, to detect a second type of overload as a result of one of the parameters crossing a second threshold as suggested by Volftsun, because a second threshold may correspond to an upper overload threshold value that indicates a saturation condition in the base station which is an

indication of overload that is higher than the overload resulting from crossing a lower overload threshold value, i.e., first type overload.

Regarding claim 29, the claim is rejected over the same reasons stated about claim 11 as it recites the same limitations of claim 11. See remarks about claim 11 above.

18.   **Claims 32 and 34** are rejected under 35 U.S.C. 103(a) as being unpatentable over GANDHI et al. in view of ANDERSSON (US 5,697,054).

Regarding claim 32, Gandhi discloses a base station configured to support communications with a plurality of communication devices, the communications placing a load on the base station, the base station comprising:

a processor configured to monitor a plurality of parameters each relating to the load on the base station (col.2, lines 26-32; the base station includes a pair of measurers for measuring, i.e. monitoring, system performance indicators), and to detect an overload as a result of one of the parameters crossing a threshold (col.2, lines 54 – col.3, lines 1-5; col.4, lines 47 – col.5, lines 1-10; col.9, lines 30-33; the base station establishes a blocking threshold upon the measured second performance indicator that represent an overload control threshold for preventing overloading of the wireless communication systems with active subscribers stations, therefore if the first performance indicator exceeds the blocking threshold the wireless communication system rejects new calls because the system is overloaded).

Gandhi fail to disclose wherein the base station comprises a second processor configured to support communications with the communication devices, wherein one of the parameters is a function of loading on the second processor.

However, Andersson teaches a base station system comprising a plurality of processors as shown in figure 1 (i.e., RPD1, RPD2, …) that monitors the load in each of the processors and

shares the load between processors for eliminating the risk of overload in the processors (abstract; col.1, lines 35-60).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, for a base station to comprise a second processor and wherein one of the parameters is a function of the loading on the second processor, as suggested by Andersson, because it is well known in the art for a base station system to comprise plural processors and monitors the load in each of the processors for maintaining the system stable.

Regarding claim 34, Gandhi discloses a base station configured to support communications with a plurality of communication devices, the communications placing a load on the base station, the base station comprising:

a processor configured to monitor a plurality of parameters each relating to the load on the base station (col.2, lines 26-32; the base station includes a pair of measurers for measuring, i.e. monitoring, system performance indicators), and to detect an overload as a result of one of the parameters crossing a threshold (col.2, lines 54 – col.3, lines 1-5; col.4, lines 47 – col.5, lines 1-10; col.9, lines 30-33; the base station establishes a blocking threshold upon the measured second performance indicator that represent an overload control threshold for preventing overloading of the wireless communication systems with active subscribers stations, therefore if the first performance indicator exceeds the blocking threshold the wireless communication system rejects new calls because the system is overloaded);

a receiver (Fig. 1; receiver 14); and a transmitter (Fig. 1; transmitter 12), wherein one of the parameters is a function of receiver stability, or transmission power requirements (col.2, line 54 – col.3, lines 1-5; col.4, lines 58-62; col.3, lines 23-29, 36-42; col.4, lines 4-7; the base station measures

a first performance indicator, i.e. parameter, which is the interference rise over the background noise

that is a measure of signal quality or reliability over a defined coverage area for the reverse link).

Gandhi fail to disclose wherein the base station comprises a second processor configured to

support communications with the communication devices. However, Andersson teaches a base

station system comprising a plurality of processors as shown in figure 1 (i.e., RPD1, RPD2, ...) that

monitors the load in each of the processors and shares the load between processors for eliminating

the risk of overload in the processors (abstract; col.1, lines 35-60).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time

of the invention, for a base station to comprise a second processor, as suggested by Andersson,

because it is well known in the art for a base station system to comprise plural processors for sharing

the load of mobile devices between them and maintain the system stable.

19.   **Claim 37** is rejected under 35 U.S.C. 103(a) as being unpatentable over GANDHI et al. in

view of ANDERSSON, and further in view of LAAKSO.

Regarding claim 37, Gandhi discloses a base station configured to support

communications with a plurality of communication devices, the communications placing a load on

the base station, the base station comprising:

a processor configured to monitor a plurality of parameters each relating to the load on the

base station (col.2, lines 26-32; the base station includes a pair of measurers for measuring, i.e.

monitoring, system performance indicators), and to detect an overload as a result of one of the

parameters crossing a threshold (col.2, lines 54 – col.3, lines 1-5; col.4, lines 47 – col.5, lines 1-10;

col.9, lines 30-33; the base station establishes a blocking threshold upon the measured second

performance indicator that represent an overload control threshold for preventing overloading of

the wireless communication systems with active subscribers stations, therefore if the first

performance indicator exceeds the blocking threshold the wireless communication system rejects

new calls because the system is overloaded);

a receiver (Fig. 1; receiver 14); and a transmitter (Fig. 1; transmitter 12), wherein one of the

parameters is a function of receiver stability (col.2, line 54 – col.3, lines 1-5; col.4, lines 58-62; col.3,

lines 23-29, 36-42; col.4, lines 4-7; the base station measures a first performance indicator, i.e.

parameter, which is the interference rise over the background noise that is a measure of signal

quality or reliability over a defined coverage area for the reverse link).

Gandhi fail to disclose wherein the base station comprises a second processor configured to

support communications with the communication devices, and a third one of the parameters is a

function of loading on the second processor.

However, Andersson teaches a base station system comprising a plurality of processors as

shown in figure 1 (i.e., RPD1, RPD2, ...) that monitors the load in each of the processors and

shares the load between processors for eliminating the risk of overload in the processors (abstract;

col.1, lines 35-60).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time

of the invention, for a base station to comprise a second processor and wherein one of the

parameters is a function of the loading on the second processor, as suggested by Andersson, because

it is well known in the art for a base station system to comprise plural processors for sharing the

load of mobile devices between them and maintain the system stable.

Nevertheless, the combination of Gandhi and Andersson fail to disclose wherein the second

one of the parameters is a function of transmission power requirements for the transmitter.

However, Laakso teaches a method for traffic load control in a telecommunication network

comprising the steps of setting a first reference load value for the load of a respective cell (abstract,

lines 1-11); the method measures the parameter PrxTotal which is the total received power in the

uplink measured on cell basis (Page 3, Table), and establishes an overload condition if the PrxTotal

exceeds the overload threshold PrxThreshold (p.0071; p.0074).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of

the invention, for one of monitored parameters comprises transmission power requirements for a

base station transmitter as suggested by Laakso, because is a parameter well known to be used to

estimate and control the state of congestion of a communication system due to wireless

communication devices.

20.   **Claim 38** is rejected under 35 U.S.C. 103(a) as being unpatentable over GANDHI et al. in

views of ANDERSSON, and LAAKSO, and further in view of PADOVANI.

Regarding claim 38, the combination of Gandhi, Andersson, and Laakso disclose the base

station of claim 37, but fail to disclose wherein a fourth of the parameters is a function of the

number of communication devices in communication with the base station.

However, Padovani teaches that a simple means for determining reverse link loading is to

simply count the number of active users in the base station (col.4, lines 32-34). Therefore, it would

have been obvious to one having ordinary skill in the art at the time of the invention for one of the

monitored parameters to be a number of the communication devices in communication with the

base station as suggested by Padovani, because it is a simple means for determining reverse link

loading.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marisol Figueroa whose telephone number is (571) 272-7840. The examiner can normally be reached on Monday Thru Friday 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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